Before the

Utah Public Service Commission

PSC Case No. 01-035-01

PacifiCorp

Direct Testimony and Exhibits of

Alan Chalfant

On Behalf of

Utah Industrial Energy Consumers

Project 7518 June 2001



Before the

Utah Public Service Commission PSC Case No. 01-035-01

Direct Testimony of Alan Chalfant

1	Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	Α	Alan Chalfant; 1215 Fern Ridge Parkway, Suite 208; St. Louis, Missouri 63141-2000.
3	Q	WHAT IS YOUR OCCUPATION?
4	Α	I am a consultant in the field of public utility regulation with Brubaker & Associates,
5		Inc., energy, economic and regulatory consultants.
6	Q	PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND
7		EXPERIENCE.
8	Α	My qualifications are stated in Appendix A to this testimony.
9	Q	ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?
10	Α	I am appearing on behalf of the Utah Industrial Energy Consumers (UIEC). The
11		members of UIEC include numerous large customers of PacifiCorp (Company).

1 Q WHAT IS THE SUBJECT OF YOUR TESTIMONY?

A My testimony will discuss PacifiCorp's proposed adjustments to test year power market prices and provide an analysis of the short-term purchases and sales of PacifiCorp in electricity power markets. This latter analysis will be directed toward determining whether PacifiCorp's purchases and sales of short-term power provide a benefit to its Utah retail customers or if, in fact, the Utah retail customers are subsidizing these activities.

8 Year Test Purchased Power Price Adjustments

Q WHAT ADJUSTMENTS HAS PACIFICORP MADE TO ITS TEST YEAR POWER

MARKET COSTS?

- PacifiCorp adjusted the prices it used to calculate its purchased power costs and power sales revenues for the months of October 1999 through May 2000 to reflect the higher electricity power market prices that began to be experienced in May 2000.

 These adjustments are imprecise, not reflective of the non-price implications of the changes in power markets, based on a very small number of months, and their magnitude is extremely large. These adjustments should not be allowed.
- 17 Q HOW DID PACIFICORP DETERMINE THE LEVEL OF ITS PROPOSED

ADJUSTMENTS?

A Basically, the Company looked at historical relationships between monthly averages in relevant price indexes and adjusted the actual prices for the months of October 1999 through May 2000 based on only four months (June through September) of 2000 prices in such a way as to maintain the historical relationships between time periods. Exhibit _____ (AC-1), Schedule 1, is a copy of PacifiCorp's response to UIEC Data Request No 6.8 which describes in greater detail the calculations made by the Company.

Q WHY DO YOU SAY THAT THESE ADJUSTMENTS ARE IMPRECISE?

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These adjustments that are based on monthly and seasonal average prices are applied to prices that change hourly. More specifically, from the information we have been provided, it does not appear that these adjustments make any attempt to use the timing of the Company's purchases and sales to develop properly weighted average monthly prices. For example, it would apply the same weightings to a month in which 80% of PacifiCorp's purchases were during peak hours as it would to a month in which only 50% of its purchases were in peak hours.

Also, based on the formulas provided in the Company's response to UIEC Data Request No. 6.8, (Exhibit _____ (AC-1), Schedule 1), the adjustments are not even based on individual months. Rather, they are based on the relationship of prices in June through September to the total year applied to actual prices during June through September 2000. In other words, if the average price for the five-month period covering January through May was historically 90% of the average price for the four-month period covering June through September, then the adjustment factor would be set to make the adjusted prices for January through May bear that same relationship (i.e., 90% of the June through September prices).

WHAT ARE THE NON-PRICE IMPLICATIONS OF THE POWER MARKET PRICE CHANGES THAT YOU CLAIM ARE IGNORED BY THESE ADJUSTMENTS?

The amount and timing of wholesale purchases and sales are certain to change as a result of the dramatic changes in power market prices for the period June through September 2000, which form the basis for PacifiCorp's adjustments. Yet, the mechanism used by the Company to apply its adjustments assumes that it would have made the identical transactions regardless of the price. This is economic nonsense. When prices increase four-fold or more from a prior year, players in the market will respond.

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In fact, PacifiCorp did respond. Table 1, below, compares the various types of wholesale transactions PacifiCorp engaged in during the months of October and November 1999 with those for the same months in 2000. This comparison shows that in response to the changes in market conditions, PacifiCorp sharply reduced its long- and intermediate-term sales while increasing its long-term purchases by more than 60%. Both short-term purchases and sales also increased significantly during this period. In addition to the changes shown in Table 1, it is likely that the timing of purchases and sales changed as well.

	IADLL		
Comparison of Power Purchase and S	of November and ales Volumes D		<u>d 2000</u>
Description	Nov/Dec 1999 (MWh)	Nov/Dec 2000 (MWh)	Percent Change
Long-term firm sales Intermediate-term firm sales	1,634,603 815,737	1,418,206 574,180	-13.2% -29.6%

783,704

3,280,540

3,214,751

Long-term firm purchases

Short-term purchases

Short-term sales

1,287,884

4,041,000

3,628,945

64.3%

23.2%

12.9%

TABLE 1

As the dramatic changes in the composition of wholesale transactions shown in Table 1 indicates, more than just prices changed as a result of changing market conditions between 1999 and 2000.

WHY DO YOU STATE THAT THE PROPOSED ADJUSTMENTS ARE NOT REPRESENTATIVE?

Because they are all based on market prices during only four months of 2000, a period that represents the beginning of the most dramatic change in electricity markets that has ever occurred. In fact, the price changes that occurred were very

uneven viewed on a monthly average basis, with even larger increases occurring in the 2000/2001 winter months. Exhibit _____ (AC-1), Schedule 2, shows the erratic pattern of price increases that have taken place since May 2000. It is not obvious whether these subsequent price changes had a negative or positive impact on PacifiCorp's costs and revenues, for example, because, they may have had a greater impact on sales than purchases and, as a result, increased revenue more than costs. What is certain is that the adjustments made reflected the wrong prices and, as discussed above, were applied to different transactions than would have taken place with the higher prices in effect.

HOW LARGE ARE PACIFICORP'S PROPOSED ADJUSTMENTS?

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During some months, certain purchases were increased by a multiplier of 6.5 or higher. Overall, the range of multipliers applied to sales and purchase prices ranged from 1.7 to 6.8. Table 2, below, shows the unweighted average of the eight monthly adjustments for the various purchases and sales to which the adjustments were applied.

TABLE 2	
Average Multipliers Used by Pac Power Purchase and Sa	
Purchase Price Multipliers	
Type of Transaction	Multiplier
SCE Purchase	4.2
Short-Term Firm PPL	4.1
Short-Term Firm UPL	3.3
System Purchases PPL	4.6
System Purchases UPL	3.5
Sales Price Multipliers	
Type of Transaction	Multiplier
Green Mountains	2.2
Short-Term Firm PPL	4.1
Short-Term Firm Intertie	3.4
Short-Term Firm UPL	3.5
System Sales PNW	4.1
System Sales PSW	4.1
System Sales UPL	3.0

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As this table shows, nearly all of the prices were multiplied by a factor of at least 3. The only factor under 3 was applied to a relatively small volume of sales.

IS IT YOUR POSITION THAT THE INCREASES IN ELECTRICITY POWER MARKET PRICES HAVE NOT BEEN IMPORTANT?

Certainly not. To the extent that reasonably accurate adjustments can be made they should be, but PacifiCorp's proposed adjustments are not reasonable. It should also be recognized that the higher market prices impact both the purchase costs and the sales revenue. Thus, with a system such as PacifiCorp, that owns resources and has long-term commitments sufficient to meet its requirements, the net impact should not be intolerable as long as it is acting appropriately to minimize its costs. Considering this, coupled with the improper method the Company has used to develop its proposed adjustments, the risk of misstating the revenue requirement increases substantially if the adjustments are allowed.

If, indeed, PacifiCorp is suffering harm as a result of the large increases in purchase power prices that have occurred subsequent to the test year, it would be more appropriate to file a new case after it has data that fully reflects what it argues are long-term changes in market prices, rather than to make incorrect adjustments to historical data. It should be noted in this regard that the impact on PacifiCorp's profitability in the post test year period is in large part a result of the outage of the Hunter 1 power plant and the cost of replacing its production. These issues are supposed to be dealt with outside the context of this proceeding, however. Apart from replacing Hunter I output, it is not clear whether the changes in market price have been harmful or beneficial to PacifiCorp.

WHAT IS THE NET EFFECT OF THE ADJUSTMENT FOR POWER MARKET 1 Q 2 PRICES THAT PACIFICORP HAS PROPOSED? 3 Based on the information supplied by PacifiCorp in its response to UIEC Data Α Request No. 6.8, (Exhibit___(AC-1), Schedule 1) which shows the price adjustment, 4 and in its response to the United States Executive Agencies Data Request No. 1.2 5 which shows the corresponding volumes, I have estimated the impact of the 6 proposed adjustment to be \$102 million on a system-wide basis. The development of 7 this amount is shown in Exhibit ____ (AC-1), Schedule 3. As that Schedule shows, 8 the Company is proposing to increase the cost of approximately 10.9 million MWh of 9 purchases by \$949 million, while increasing the revenue from approximately 10.0 10 11 million MWh of sales by \$848 million. This results in a net increase in power costs of 12 \$102 million, which is \$37.7 million for the Utah jurisdiction. PLEASE SUMMARIZE YOUR PROPOSAL WITH RESPECT TO PACIFICORP'S 13 Q 14 PROPOSED ADJUSTMENT FOR POWER MARKET PRICES. This adjustment should not be allowed. As a result, the Company's requested 15 Α revenue requirement should be decreased by \$37.7 million. 16 PacifiCorp's Wholesale Market Activities 17 WHAT IS THE PURPOSE OF YOUR ANALYSIS OF THE COMPANY'S 18 Q 19 WHOLESALE MARKET ACTIVITIES? My purpose was to determine whether its short-term market activities provide a 20 Α benefit to its Utah retail customers or if, in fact, the Utah retail customers are 21 22 subsidizing these activities.

1 Q WHY HAVE YOU FOCUSED YOUR ATTENTION ON PACIFICORP'S SHORT2 TERM PURCHASES AND SALES?

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Because, by and large, it is not necessary for PacifiCorp to engage in these activities in order to supply its customers' requirements and meet its long-term sales commitments. Based on PacifiCorp's response to the Retail/Wholesale Revenue Requirement Forum Item 3, for calendar year 2000, only 4,757,109 MWh of its total short-term purchases of 23,313,883 MWh, about 20%, were needed to meet its requirements. The remainder was used to support short-term sales transactions. For calendar year 2000, the percentage of short-term purchases needed to meet requirements was about 20% of total short-term purchases.

IS IT REASONABLE FOR PACIFICORP TO MAKE ALL THESE SHORT-TERM PURCHASES AND SALES THAT ARE NOT REQUIRED TO SERVE ITS CUSTOMERS?

No. While it is possible that PacifiCorp could make a profit on these transactions which would reduce the total costs on which retail rates are based, it is also possible that PacifiCorp could lose money on them, which means that retail rates would be inflated and forced to subsidize the Company's market activities. Forcing retail customers to take on such market risks that are unrelated to the Company's obligation to serve is never proper. Forcing them to do so when power markets in the western states are at unprecedented levels and demonstrating extreme volatility is intolerable.

22 Q WHAT ARE THE CONSEQUENCES ON THE COMPANY AND ITS RETAIL 23 CUSTOMERS IF THE COMPANY MAKES PROFITABLE TRANSACTIONS?

A If the test year results are profitable, the customers will benefit through reductions to cost of service at the time rates are set. Subsequent to the test year, if the Company

increases its profits above test year levels, the extra profits will accrue to the 1 2 Company. WHAT WILL HAPPEN IF THE COMPANY CANNOT MAINTAIN PROFITS ON ITS 3 Q SHORT-TERM MARKET OPERATIONS AT TEST YEAR LEVELS? 4 5 It will file for a rate increase. Α WHICH OF THESE CIRCUMSTANCES IS MOST LIKELY? 6 Q Neither. The most likely circumstance is that the Company will file for a rate case 7 Α with a cost of service that has embedded in it a loss on short-term power market 8 transactions. This will result in retail rates that subsidize the present level of 9 marketing losses. With these rates in place, the Company will be able to keep all of 10 its future marketing profits plus the subsidy that is built into the rates. That is what 11 PacifiCorp is proposing in this case. 12 IS THERE ANY WAY THAT THIS SUBSIDIZATION OF THE COMPANY'S POWER 13 Q MARKETING ACTIVITIES CAN BE AVOIDED? 14 Yes. Essentially, for rate case purposes, the Company's short-term sales activity 15 Α should be kept separate from its activities as a utility. This "power marketing" function 16 should be assigned all costs of purchases required to support such sales and it 17 should be assigned all revenues derived from its short-term sales, except for those 18

supported by rate-based generation or other long-term resources. The revenue

requirement must then be reduced to eliminate the effect of the losses.

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1 Q ARE THERE ANY PARTICULAR PRECAUTIONS THAT MUST BE OBSERVED IN 2 APPLYING THIS METHOD?

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Yes. It is critical to avoid time-related differences in comparisons of costs and revenues to be assigned to the power marketing function. For example, it would not be reasonable to compare a purchase made on a summer afternoon with a price of \$10 per MWh to a sale that was made on a winter night with a price of \$3 per MWh and conclude that the Company lost \$7 on that pair of transactions. In fact, the Company may have been selling for \$12 per MWh at the same time the \$10 per MWh purchase was made, and purchasing for \$2.75 per MWh at the same time the \$3 sale was made.

Using aggregate annual or monthly data on short-term sales and purchases implicitly involve such comparisons. Specifically, if purchases tend to occur more heavily during hours when market prices are high and sales tend to be made at hours when market prices are low, then comparing average sales and purchase prices may not give an accurate picture of whether the Company's marketing activities are profitable. Nevertheless, if the Company did not provide information to allow the Company to show that its operations are profitable.

HAS PACIFICORP PROVIDED INFORMATION THAT WOULD ALLOW AN ACCURATE DETERMINATION OF THE PROFITS OR LOSSES IT HAS MADE FROM ITS SHORT-TERM PURCHASES AND SALES?

Yes. PacifiCorp's response to the Retail/Wholesale Revenue Requirement Forum Item 3, as supplemented, provides a computer database listing of all transactions, by hour, for October 1999 through December 2000. In the remainder of this testimony, I will refer to this simply as the Company's database. With the use of this database, it was possible to calculate the profitability of PacifiCorp's short-term transactions on an

hourly basis. In order to do this, however, it was necessary to develop a computer model capable of dealing with the more than two million entries in the Company's database.

4 Q WHAT TIME PERIOD DID THE DATA THAT YOUR MODEL ANALYZED COVER?

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We used data from the test year for the period January through September 2000. We adjusted the months of October and November 1999 by substituting actual data for the corresponding months in 2000. This adjustment is more precise than the Company's proposed adjustments described above for several reasons. First, it relies on actual prices that PacifiCorp paid or charged. Second, it used hourly data rather than monthly data and, third, it reflects the Company's responses to the power market price changes rather than assuming the Company would not change its activities regardless of price.

13 Q WHY DIDN'T YOU ALSO REPLACE DECEMBER 1999 THROUGH MAY 2000 14 WITH ACTUAL DATA FOR DECEMBER 2000 THROUGH MAY 2001?

Data for the period January through May 2001 was not available. Data for December 2000 was available, but reflects the outage of Hunter Unit 1 which is not representative or normal activity.

18 Q PLEASE DESCRIBE THE MODEL DATA THAT YOU WERE PROVIDED BY 19 PACIFICORP.

20 A The Company's database reports each transaction using both internal and FERC classification schemes. Our model separates the various entries in the PacifiCorp database based on the FERC categories. The FERC defines its categories as follows:

1 1) RQ - Requirements Service.

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- 2 2) LF Long-term firm service where "long-term" means five years or longer.
- 3 3) IF Intermediate-term firm service where "intermediate-term" means longer than one year but less than five years.
 - 4) SF Short-term service for commitments of one year or less.
- 6 5) LU Long-term service from a designated generating unit.
 - IU Intermediate-term service from a designated generating unit.
 - EX Exchanges of electricity involving a balancing of debits and credits for energy, capacity, etc.
 - 8) OS Other service which includes those services which cannot be placed in the above categories such as non-firm service.

The database assigns a positive number to power coming into the system such as purchases or generation and a negative number to power leaving the system such as sales. For each hour, the sum of these numbers represents the native load on the system.

16 Q PLEASE DESCRIBE THE MODEL THAT YOU DEVELOPED TO ANALYZE THIS 17 DATA.

In those cases where net requirements were positive, the model looks at the short-term purchases that were made and determines the cost of meeting those requirements by assigning the lowest priced purchases until all net requirements are met. The remaining purchases are assigned as short-term purchases in support of short-term sales. These amounts are later compared to the revenues from short-term sales during the hour.

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In those cases where the net requirements are negative, this means that there is company-owned generation and/or long-term purchase volumes available to be sold on the short-term market after all of the Company's requirements have been met. Short-term sales made from these resources are credited to the retail customers because it is the retail customers that pay for these resources. These credits are determined based on the average price of short-term sales during the hour.

HOW DID YOU USE THE RESULTS OF THIS MODEL TO ANALYZE PACIFICORP'S SHORT-TERM WHOLESALE MARKET ACTIVITIES?

We began by assigning all revenues from the Company's short-term sales to its power marketing function. We also assigned all revenue from demand charges paid under its short-term sales arrangements to this function. Next, we deducted the revenue that was derived from short-term sales supported by long-term resources to arrive at adjusted revenue from short-term sales. From this figure, we deducted the cost of short-term purchases required to support the short-term sales. A positive result indicates a profit and a negative result indicates a loss for the power marketing function. We summed the result of the calculations that were made on an hourly basis by both month and year.

1 Q WHAT DID THOSE RESULTS INDICATE?

- 2 A As shown in Table 3, during the adjusted test year PacifiCorp's power marketing
- 3 function lost approximately \$47 million.

TABLE 3	(000)
Commodity Revenue From Short-Term Sales	\$1,028,581
Plus: Demand Charge Revenue From Short-Term Sales	\$ 719
Less: ST Sales Revenue From LT Resources	\$ 34,438
Adjusted Short-Term Sales Revenue	\$ 994,862
ST Purchase Costs Assigned to Power Marketing Function	\$1,042,269
Profits (Losses) From Power Marketing Function	\$ (47,407)

- These results are reported on a monthly basis in Exhibit ____ (AC-2), Schedule 2.
- 5 Q WHAT IS THE SHARE OF THESE LOSSES THAT ARE DERIVED FROM THE
- 6 UTAH JURISDICTION?
- 7 A Approximately \$17.6 million.
- 8 Q PLEASE SUMMARIZE YOUR RECOMMENDATIONS BASED ON THE TWO
- 9 **ISSUES YOU HAVE ANALYZED.**
- 10 A PacifiCorp's requested revenue increase in this case should be decreased by \$37.7
- million to remove its inappropriate adjustments to market prices, and by \$17.6 million
- 12 to remove the ratepayer subsidy of its power marketing function. The total of these
- two adjustments is \$55.3 million
- 14 Q DOES THIS COMPLETE YOUR DIRECT TESTIMONY?
- 15 A Yes, it does.

Qualifications of Alan Chalfant

1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRE	1	Ω	PI FASE ST	ATE YOUR	NAME AND	RUSINESS	ADDRESS
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2 A Alan Chalfant. My business mailing address is PO Box 412000, 1215 Fern Ridge

Parkway, Suite 208, St. Louis, Missouri 63141-2000.

4 Q WHAT IS YOUR OCCUPATION?

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5 A I am a consultant in the field of public utility regulation and am a principal in the firm of

Brubaker & Associates, Inc., energy, economic and regulatory consultants.

7 Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

I hold a Bachelor's Degree in Mathematics from Northern Illinois University and the degree of Master of Arts in Economics from Washington University. From 1968 to 1973, I was Assistant Professor of Economics at California State University at Northridge, California. Among other courses in economics and statistics, I taught courses in the economics of antitrust and regulation at both the graduate and undergraduate levels. I have also taught courses at both graduate and undergraduate levels at California Lutheran College.

In 1973, I accepted a position with the Public Service Commission of Wisconsin in the Utility Rates Division. While at the Commission, I designed the rates for electric and natural gas utilities and aided in the preparation for cross-examination of witnesses representing utilities and intervenors before the Commission.

I joined the firm of Drazen-Brubaker & Associates, Inc. in September 1974 and became a Principal in that firm in 1988. In April 1995 the firm of Brubaker & Associates, Inc. (BAI) was formed. It includes most of the former DBA principals and staff and

currently has its principal office in St. Louis, Missouri, with branch offices in Kerrville, Texas; Plano, Texas; Denver, Colorado; and Chicago, Illinois.

Since 1974, I have been engaged in the preparation of studies relating to utility rate matters and have participated in numerous electric and gas rate cases. In total, I have participated in cases involving more than 60 electric utilities, 30 gas distribution utilities and 20 interstate pipelines.

7 Q HAVE YOU PREVIOUSLY TESTIFIED BEFORE A REGULATORY COMMISSION OR 8 A PUBLIC AUTHORITY?

I have testified before the Federal Energy Regulatory Commission and more than thirty state public utility regulatory commissions including the California Public Utilities Commission (CPUC). I have appeared before CPUC in 34 proceedings over the last 22 years. In addition, I have appeared before a number of municipal regulatory bodies and courts.

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UIEC Data Request No. 6.8

Mr. Widmer's testimony at page 10 states that "prices for the period October 1999 through May 2000 were annualized to reflect prices incurred by the Company during the period June - September 2000."

- (a) Please provide a narrative description of how each price was adjusted.
- (b) Please provide a side-by-side comparison of each of the unadjusted wholesale price inputs for each month during the period October 1999 through May 2000 with the corresponding adjusted price.
- (c) Provide work papers for the comparisons in response to Item (b).
- (d) Were any adjustments made to the prices for the period June through September 2000? If so, for all such adjustments, please provide a narrative description of the adjustment including the reason for it, a comparison of the unadjusted wholesale price input for each month from June through September, 2000, and all work papers generated to perform the comparison.

Response to UIEC Data Request No. 6.8

(a) For each Dow Jones market price index, first, calculate the 12 monthly averages from the year of inception to 1999 (MAvg).

Second, calculate the 12-month average of the above monthly averages (AAvg) and the average of June through September (JSAvg), and the ratio of June-September average over annual average (Ratio = JSAvg / AAvg).

Third, calculate the average actual prices for the period from June 2000 through September 2000 (JSAvg₂₀₀₀). The annual average price (AAvg₂₀₀₀) for 2000 is determined by dividing the ratio developed above into the JSAvg₂₀₀₀: $AAvg_{2000} = JSAvg_{2000} / Ratio$.

Fourth, the annualized monthly prices (MP) for the period from October 1999 through May 2000 are calculated as:

$$MP = AAvg_{2000} * Mavg / AAvg$$

- (b) For the inputs requiring market prices, the actual prices for the period from October 1999 to May 2000 are replaced by the annualized prices developed as described above. The comparisons of inputs are provided as Attachment UIEC 6.8b.
- (c) Please refer to above.

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Exhibit ____ (AC-1) Schedule 1 Page 2 of 4

(d) No. Actual prices were used for the period June 2000 through September 2000.

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PACIFICORP

UIEC DATA REQUEST ATTACHMENT UIEC 6.8(b)

	Oct-99	Nov-99	Dec-99	Jan-00	Feb-00	Mar-00	Apr-00	May-00	Jun-00	Jul-00	Aug-00	Sep-00
Actual Prices												
Green Mountains	71.24	55.84	42.51	36.51	55.69	38.70	45.58	90.60	175.16	141.40	147.54	184.70
Short Term Firm P	37.71	35.18	27.51	26.75	29.30	26.52	23.99	31.90	81.12	83.85	132.83	109.20
Short Term Firm Interti	41.10	34.95	29.33	32.44	32.91	32.33	30.13	55.72	181.09	190.66	215.28	173.22
Short Term Firm U	30.45	27.57	26.11	26.17	25.72	27.12	30.20	37.23	49.58	101.23	105.12	63.83
System Sales PNW	54.64	29.78	25.68	24.20	29.30	25.65	22.75	31.90	81.12	83.85	132.83	86.45
System Sales PSW	72.99	20.10	25.12	26.18	22.95	25.94	23.17	55.72	181.09	88.89	140.47	115.85
System Sales UPL	56.69	34.67	27.26	27.53	28.49	26.47	26.40	46.89	170.57	105.59	155.90	77.74
SCE Purchase	45.06	35.36	39.87	30.97								
STF Purchases PPL	36.99	31.80	29.16	28.07	25.77	26.17	23.00	27.65	62.95	89.12	110.16	100.75
STF Purchases UPL	33.25	29.55	27.21	26.21	23.58	28.62	37.15	43.47	90.17	132.15	138.86	99.68
System Purchases PPL	36.35	30.47	23.29	15.88	45.84	24.75	24.70	26.35	67.61	55.14	144.22	123.59
System Purchases UPL	34.04	22.46	24.01	25.21	25.50	33.77	32.86	38.60	77.86	76.17	103.16	92.66
Annualized Prices												
Green Mountains	146.88	123.35	128.93	98.01	83.90	89.00	113.95	97.16	175.16	141.40	147.54	184.70
Short Term Firm P	177.15	160.20	150.61	103.74	82.35	89.46	114.70	100.88	81.12	83.85	132.83	109.20
Short Term Firm Interti	177.03	151.62	136.40	99.94	86.55	91.66	116.56	96.46	181.09	190.66	215.28	173.22
Short Term Firm U	135.90	122.36	116.12	92.68	79.56	85.36	88.23	88.05	49.58	101.23	105.12	63.83
System Sales PNW	174.52	158.19	149.80	100.55	76.98	84.30	122.56	99.40	81.12	83.85	132.83	86.45
System Sales PSW	173.88	149.46	135.64	96.97	79.88	85.65	125.67	95.03	181.09	88.89	140.47	115.85
System Sales UPL	132.78	120.00	115.36	89.05	72.94	78.93	95.26	86.64	170.57	105.59	155.90	77.74
SCE Purchase	190.94	167.62	156.37	119.59								
STF Purchases PPL	176.27	148.28	134.31	99.51	86.10	90.75	102.15	103.23	62.95	89.12	110.16	100.75
STF Purchases UPL	135.10	116.55	112.37	91.09	79.84	84.66	77.11	94.25	90.17	132.15	138.86	89.68
System Purchases PPL	170.46	154.82	153.14	107.85	80.00	79.95	116.27	96.22	67.61	55.14	144.22	123.59
System Purchases UPL	127.97	116.03	118.50	97.36	99'92	73.51	89.64	83.62	77.86	76.17	103.16	92.66

Attachment UIEC 2001 DR 6.8b:

COB Index Prices Index Price Comparisons

Line	Month	Previous 2 Years	Current Year	% Change
		(1)	(2)	(3)
1	May-00	22.60	58.99	161.0%
2	Jun	21.13	121.34	474.3%
3	Jul	32.55	169.28	420.1%
4	Aug	42.24	220.13	421.2%
5	Sept	38.67	145.57	276.5%
6	Oct	40.32	112.61	179.3%
7	Nov	33.11	153.94	365.0%
8	Dec	31.56	497.88	1477.4%
9	Jan-01	26.81	257.44	860.3%
10	Feb	25.48	312.18	1125.4%
11	Mar	24.56	275.72	1022.9%
12	Apr	28.39	307.14	981.9%
13	May	43.51	299.50	588.3%

Revenue From Sales and Costs of Purchases of Energy with Actual Prices

			October	_	November	_	December	January		February	_	March		April	_	Мау
		Total	1999		1999		1999	2000		2000	- •	2000		2000	•	2000
Green Mountains	s,	4,965,734.12 \$	718,241.68	ما	732,006.56	۵,	634,376.73 \$	615,083.97	₩	895,383.82 \$		541,993.50 \$		\$ 99.709,009		228,040.20
Short Term Firm Sales P	49	94,596,114.73 \$	14,841,739.30 \$. A	16,360,391.35		12,472,190.17 \$	7,374,387.88	₩	8,489,621.76 \$	5	13,361,743.58 \$		9,752,604.31 \$	Ξ	1,943,436.38
Short Term Firm Sales Intertie	69	60,103,254.49 \$	15,672,018.11		13,582,790.56	44	6,799,417.68 \$	4,005,267.81	49	2,958,570.07 \$	ო	3,971,789.48 \$	•	4,678,529.17 \$	œ	8,434,871.62
Short Term Sales U	49	144,384,472.38 \$	22,712,502.75	44	18,765,299.94	۵.	17,388,189.49 \$	16,560,951.74	69	16,314,787.56 \$	4	9,267,837.92 \$	7	5,981,568.20 \$	17	7,393,334.78
System Sales PPL	₩	208,709.05 \$	'	4	,		23,404.14 \$	•	s,	6 9		4,529.68 \$		118,089.42 \$		62,685.82
System Sales UPL	69	1,751,568.08 \$,		,		• •	1,585,184.12	₩	•		,		166,383.96 \$		
	•	100000000000000000000000000000000000000			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		60 000	20 000 000		4 60 000	ŗ	9 17 500 17 5	ć	4 07 700 70	č	00 000 000
i otal Actual Sales	•	306,009,852.85	53,944,501.84	A	49,440,488.41		37,317,578.20	30,140,875.51	A	\$ 17.505,950,32	9	37,147,694.17	יי	31,291,182,12	8	36,062,366.80
SCE Purchase	s s	1,531,044.30 \$	635,165.76	s	680,998.24	٠,	131,571.00 \$	83,309.30	69	,		•		,		•
Short Term Firm Purch PPL	↔	189,931,420.77 \$	36,015,646.41	₩.	39,255,573.60	4	26,825,596.20 \$	17,586,725.17	69	17,548,699.98 \$	11	7,308,000.56 \$	~	\$ 00.766,508,0	7	24,587,181.85
Short Term Firm Purch UPL	₩	86,124,022.31 \$	12,858,506.50	6 3	8,356,237.65	s s	7,198,922.49 \$	7,920,845.47	s,	6,659,015.58 \$	77	2,158,520.12 \$	-	0,005,089.40 \$	ឧ	20,966,885.10
System Purchase PPL	49	40,624,209.82 \$	8,067,303.89	₩.	6,324,357.07	₩.	2,938,384.76 \$	3,798,660.19	₩	5,891,287.49 \$	4	4,866,920.79 \$		3,558,983.30 \$	S.	5,178,312.32
System Purchase UPL	\$	6,446,508.65 \$	1,919,956.52	€9	50,403.59	49	1,995,703.24 \$,	\$	1,156,834.67 \$		646,262.28 \$		ده ۱		677,348.35
Total Actual Purchases	69	324,657,205.85 \$ 59,496,579.08	59,496,579.08	∽	54,667,570.16	€9	39,090,177.68 \$	29,389,540.13	69	31,255,837.73 \$	怒	34,979,703.75 \$	Ñ	24,368,069.70 \$	51	51,409,727.63

Revenue From Sales and Costs of Purchases of Energy with Adjusted Prices

		Total		October 1999		November 1999	_	December 1999		January 2000		February 2000		March 2000		April 2000		May 2000
Green Mountains	89	11,014,496.24	s	1,480,844.16	<u>چ</u>	1,616,995.15 \$	\$	1,924,022.39 \$	١.	1,651,174.47	م،	1,348,944.20 \$		1,246,445.00 \$	_	1,501,519.15 \$		244,551.72
Short Term Firm Sales P	69	394,435,869.29	₩	69,721,933.60	s,	74,500,701.93 \$	ça.	68,281,954.24 \$		28,598,841.06		23,860,762.87 \$	4	45,073,211.95 \$	4	46,628,750.07 \$		37,769,713.56
Short Term Firm Sales Intertie	69	222,131,676.14	•	67,504,072.18	\$	58,924,827.03 \$	ų,	31,620,885.49 \$	-	2,339,286.83	م,	7,780,742.61 \$	-	11,260,569.86 \$	₽	18,099,215.39 \$	-	4,602,076.75
Short Term Sales U	69	519,569,952.53	69	101,367,130.50	49	83,283,355.12 \$	4	77,331,159.08 \$	47	58,649,942.96	40	50,466,737.88 \$	w w	60,645,377.76 \$	4	46,690,521.93 \$	4	11,135,727.30
System Sales PPL	₩	964,180.29	\$	•	69	1	€9	126,374.88 \$		'	.	,		14,887.03 \$		636,177.54 \$		186,740.85
System Sales UPL	⇔	5,727,889.53	↔	•	s	,	€9	·		5,127,520.73	<u>ب</u>	•		•		\$ 08.896,009		•
Total Adjusted Sales Revenue	↔	1,153,844,064.03 \$ 240,073,980.44	⇔	40,073,980.44	·•	218,325,879.23 \$	⇔	\$ 179,284,396.08 \$	5	106,366,766.06	į,	83,457,187.56 \$	=	118,240,491.60 \$	17	114,156,552.89 \$	o 40	93,938,810.17
SCE Purchase	49	6,757,401.92	69	2,691,490.24	↔	3,228,193.58	€9	516,021.00 \$		321,697.10	44	•		ب		,	40	•
Short Term Firm Purch PPL	\$	799,005,283.17	≈	171,626,871.93	\$	183,044,542.56 \$	٠ ج	123,557,812.95 \$		62,346,099.81	٠.	58,631,861.40 \$	ت.	50,019,146.00 \$	4	47,983,838.85 \$	о 	91,795,109.67
Short Term Firm Purch UPL	69	267,201,379.27	\$	52,246,142.20	\$	32,958,358.65 \$	•	29,729,618.53 \$		27,528,035.63		22,546,895.84 \$,	35,965,769.16 \$	×	20,766,956.76	4	15,459,602.50
System Purchase PPL	€9	177,470,547.39	€9	37,830,883.67	49	32,134,458.88 \$	5	19,320,920.64 \$		25,798,835.13	₩	11,001,470.57 \$		15,721,628.99 \$	Ψ.	16,753,157.40	_	8,909,192.10
System Purchase UPL	s s	23,679,845.39	∽	7,217,885.88	69	260,388.63	69	9,849,680.69 \$		•	€	3,477,762.59 \$		1,406,773.47 \$,	40	1,467,354.12
Total Adjusted Purchase Costs	₩	\$ 1,274,114,457.14 \$ 271,613,273.92	69	71,613,273.92	€9	251,625,942.31 \$ 182,974,053.81 \$ 115,994,667.67	₽	182,974,053.81 \$	÷-	15,994,667.67	69	95,657,990.41 \$ 113,113,317.62	÷.	13,113,317.62 \$	86	85,503,953.01 \$	7	157,631,258.39

Impact of Differences Between Actual and Proposed Adjusted Prices

		Total	October 1999	6 -	4	November 1999	_	December 1999	January 2000		February 2000	_	March 2000	April 2000	May 2000	
Green Mountains	s	6,048,762.12 \$	762,	762,602.48	s	884,988.59	L	1,289,645.66 \$	1,036,090.50	₩	453,560.38 \$		704,451.50 \$	\$ 900,911.49 \$	16,511.52	.52
Short Term Firm Sales P	69	299,839,754.56 \$	54,880,194.31	194.31	₩	58,140,310.58		55,809,764.07 \$	21,224,453.19	₩,	15,371,141.11 \$	'n	31,711,468.37 \$	36,876,145.76 \$	25,826,277.17	.17
Short Term Firm Sales Intertie	49	162,028,421.65 \$	51,832,054.07	054.07	69	45,342,036.47		24,821,467.81 \$	8,334,019.02	69	4,822,172.54 \$		7,288,780.38 \$	13,420,686.23 \$	6,167,205.13	.13
Short Term Sales U	₩	375,185,480.15 \$	78,654,627.75	627.75	69	64,518,055.18	φ.	59,942,969.59 \$	42,088,991.22	₩	34,151,950.32 \$	4	41,377,539.84 \$	30,708,953.73 \$	23,742,392.52	.52
System Sales PPL	↔	755,471.24 \$		•	69	•	€9-	102,970.74 \$	•	છ	,		10,357.35 \$	518,088.12 \$	124,055.03	.03
System Sales UPL	↔	3,976,321.45 \$		•	69	,	₩.	•	3,542,336.61	69	• •		•	433,984.84 \$	•	
Total Sales Revenue Adjustment	₩.	847,834,211.17 \$ 186,129,478.60	186,129,	478.60	S	168,885,390.82	₩	141,966,817.87 \$	76,225,890.54	69	54,798,824.35 \$	60	81,092,597.44 \$	82,858,770.17 \$	55,876,441.37	.37
SCE Purchase	69	5,226,357.62 \$	2,056,	2,056,324.48	\$3	2,547,195.34	69	384,450.00 \$	238,387.80	69	,		,	'	•	,
Short Term Firm Purch PPL	69	609,073,862.40 \$	135,611,225.52	225.52	*	143,788,968.96	₩.	96,732,216.75 \$	44,759,374.64	₩.	41,083,161.42 \$	4	42,711,145.44 \$	37,179,841.85 \$	67,207,927.82	.82
Short Term Firm Purch UPL	49	181,077,356.96 \$	39,387,635.70	635.70	49	24,602,121.00	s s	22,530,696.04 \$	19,607,190.16	s)	15,887,880.26 \$	7	23,807,249.04 \$	10,761,867.36 \$	24,492,717.40	5 .
System Purchase PPL	છ	136,846,337.56 \$	29,763,579.78	579.78	€9	25,810,101.81	69	16,382,535.88 \$	22,000,174.94	69	5,110,183.08 \$.	10,854,708.19 \$	13,194,174.10 \$	13,730,879.78	9.78
System Purchase UPL	69	17,233,336.75 \$	5,297,	5,297,929.37	•>	209,985.04	€9	7,853,977.46 \$	•	•	2,320,927.92 \$	45	760,511.19 \$,	790,005.77	2.77
Total Purchase Cost Adjustment	69	949,457,251.29 \$ 212,116,694.84	212,116,	694.84	↔	196,958,372.15 \$ 143,883,876.13		43,883,876.13 \$	86,605,127.54	es.	64,402,152.68 \$		78,133,613.86 \$	61,135,883.31	106,221,530.77	77.0
Cost Adjustment less Revenue Adjus \$ Utah Allocation Factor Allocation to Utah	د م	101,623,040.11 \$ 0.37144 37,746,862.02	25,987,216.24	,216.24	₩.	28,072,981.33	∽	1,917,058.26 \$	10,379,237.00	↔	9,603,328.33 \$		(2,958,983.57) \$	(21,722,886.86) \$	50,345,089.40	9.40

PacifiCorp

Monthly Summary of Results of Short-Term Transactions

		J	Commodity	Demand Charge	Less: ST Sales Revenue	enne			છ	ST Purchases	Pro	Profits From
:		œ	Revenue from ST Sales	Revenue From ST Sales		se	N Or O	Net Revenue From ST Sales	•	Supporting ST Sales	STO	ST Wholesale Operations
	Month		(000)	(000)	(000)			(000)		(000)		(000)
~	January	s	30,235	\$ 150	€	4,108	↔	26,277	↔	26,307	↔	(30)
7	February	()	25,687	\$ 124	· &	1,917	ઝ	23,893	↔	22,236	ક્ક	657
က	March	s	36,955			6,202	↔	30,817	↔	29,635	ક્ક	1,182
4	April	↔	30,255	\$ 78		4,589	↔	25,745	↔	23,303	↔	2,442
2	May	ઝ	38,811		ક્ક	260	ઝ	38,622	↔	38,211	ક્ક	412
9	June	ઝ	94,634		ક્ક	775	↔	93,930	↔	119,668	↔	(25,738)
7	July	↔	93,121	e 8	· •	1,163	↔	91,958	↔	104,370	ઝ	(12,412)
∞	August	ઝ	169,443	ന ക	s	746	ઝ	168,697	↔	160,631	↔	8,066
တ	September	ઝ	137,228	е В	s	1,503	↔	135,725	↔	139,712	↔	(3,986)
10	October	↔	157,348	ج		5,582	ઝ	151,767	↔	154,547	↔	(2,780)
7	November	↔	178,061	ا ج	ક	1,937	↔	176,125	S	187,086	↔	(10,961)
12	December	↔	36,804	\$ 159	ss	5,656	ss	31,307	↔	35,565	S	(4,258)
13		↔	1,028,581	\$ 719	€	34,438	⇔	994,862	↔	1,042,269	↔	(47,407)
4 ^t ct	Utah Allocation Factor Allocation to Utah	tion Cta	Factor ah								ម ម	0 (17,609)